# Salvatore (Sam) Torrisi

# Curriculum Vitae

## **EDUCATION**

# PhD Neuroscience Interdepartmental Program • Summer, 2013

University of California, Los Angeles • 695 Young Drive South, Los Angeles, CA 90095 Primary advisor: Dr. Lori Altshuler of the UCLA Mood Disorders Research Program. Dissertation committee: L Altshuler, S Bookheimer, E London, M Monti, J van Horn

#### MA Applied Linguistics • Spring, 2007

University of California, Los Angeles • 3300 Rolfe Hall, Los Angeles, CA 90095 advisors: John Schumann, Charles Goodwin

## MFA Music Composition/New Media • December, 2003

California Institute of the Arts • 24700 McBean Pkwy, Valencia, CA 91355 advisors: James Tenney, David Rosenboom, Sara Roberts, Mark Trayle

## **BA** Interdisciplinary Arts and Performance (Media Studies) • May, 2001

Arizona State University West • 4701 W. Thunderbird Rd, Phoenix, AZ 85069 advisors: Richard Lerman, Daniel Lentz. *Graduated Summa Cum Laude* 

#### RESEARCH EXPERIENCE

#### Section on the Neurobiology of Fear and Anxiety. Pls: Christian Grillon, Monique Ernst.

National Institute of Mental Health. 15K North Drive, Bethesda, MD 20892 • 2016 – current. Research Fellow. 3 and 7 Tesla functional neuroimaging and connectivity analyses of the anxiety network.

## Section on the Neurobiology of Fear and Anxiety. Pls: Christian Grillon, Monique Ernst.

National Institute of Mental Health. 15K North Drive, Bethesda, MD 20892 • 2013 – 2016 Postdoctoral Fellow. 3 and 7 Tesla functional neuroimaging and connectivity analyses of the anxiety network.

## Mood Disorders Research Program. PI: Lori Altshuler.

300 UCLA Medical Plaza, Suite 1544 • April 2009 – Summer 2013

Functional neuroimaging and connectivity analyses of the euthymic mood state of Bipolar Disorder.

## Graduate Student Researcher. PI: Stephanie A. White.

White Lab, Department of Physiological Science, UCLA • Sept 2005–June 2007.

Technical assistance, hardware implementation and behavioral analysis for a songbird laboratory.

#### **INTERNSHIPS**

Internship rotation on inpatient units of UCLA Neuropsychiatric Hospital under the directorship of Dr. Laurie Casaus. August 1 – Sept 1, 2011.

Externship rotation at outpatient Mood Disorders Clinic at UCLA/Semel Institute under the directorship of Dr. Michael Gitlin. August 1 – Sept. 1, 2011.

# Cortical Thickness of Methamphetamine Addicts. PI: Edythe London.

Semel Institute, UCLA • Jan 2009-April 2009

Cortical thickness correlated with measures of impulsivity from the Balloon Analogue Risk Task (BART).

## Cross-Correlation of Observed Social Interactions. PI: Marco Iacoboni.

Ahmanson Lovelace Brain Mapping Center, UCLA • Sept 2007–March 2008

Project: Intersubject cross-correlational data mining of people observing video stimuli of social interactions. Lit review of data-driven fMRI analyses and unique behavioral coding of video stimuli.

## ANTHROPOLOGY

## Ethnography of Frontotemporal Dementia (FTD). PI: Alan P. Fiske.

Departments of Applied Linguistics, Anthropology & Psychology, UCLA • May 2006–Nov 2007. Interdisciplinary study of socio-moral dysfunction in FTD. Ethnographic fieldwork in patients' homes and care facilities, observations of diagnostic consensus meetings and interviews with patient family members.

## Burning Man Census. PIs: Megan Mullet & Kateri McRae.

Department of Anthropology, UCLA • Summer, 2007.

Technology consultant. Organized and implemented software and hardware for data acquisition (optical mark recognition) from thousands of surveys distributed at a large arts festival.

## Vanishing Identities in Caribbean Performance Art. PI: Dale Byam.

Interdisciplinary Arts and Performance, Arizona State University West • February, 1999. Digital sound recording for a documentary of underground stick fighting in Trinidad.

#### **PUBLICATIONS**

**S Torrisi**, C Nord, N Balderston, J Roiser, C Grillon, M Ernst. Resting State Connectivity of the Human Habenula at Ultra-High Field. (submitted)

**S Torrisi**, K O'Connell, A Davis, R Reynolds, N Balderston, JL Fudge, C Grillon, M Ernst. (2015) *Resting State Connectivity of the Bed Nucleus of the Stria Terminalis at Ultra-high Field*. Human Brain Mapping, 36 4076–4088

**S Torrisi**, O Robinson, K O'Connell, A Davis, N Balderston, M Ernst, C Grillon. (2016) *The Neural Basis of Improved Cognitive Performance by Threat of Shock*. Social Cognitive and Affective Neuroscience, DOI: 10.1093/scan/nsw088

N Balderston, K Vytal, K O'Connell, **S Torrisi**, A Letkiewicz, M Ernst, C Grillon. (2016) *Anxiety patients show reduced working memory related dlPFC activation during safety and threat*. Depression and Anxiety, 1-12

M Ernst, **S Torrisi**, N Balderston, C Grillon, E Hale. *FMRI functional connectivity applied to neurodevelopment, a focus on adolescence*. Annu. Rev. Clin. Psychol. 2015. 11:6.1–6.17

K Cross, **S Torrisi**, ER Losin, M Iacoboni. (2013) Controlling automatic imitative tendencies: Interactions between mirror neuron and cognitive control systems. NeuroImage 83 493-504

**S Torrisi**, MD Lieberman, SY Bookheimer, LL Altshuler. (2013) Advancing understanding of affect labeling with dynamic causal modeling. NeuroImage 82, 481-488

**S Torrisi**, T Moody, M Thomason, N Vizueta, MM Monti, JD Townsend, J Fischer, SY Bookheimer, LL Altshuler. (2013) *Differences in resting corticolimbic functional connectivity in bipolar I euthymia*. Bipolar Disorders 15(2) 156-166.

- JD Townsend, **S Torrisi**, MD Lieberman, CA Sugar, SY Bookheimer, LL Altshuler. (2013) Frontal-Amygdala Connectivity Alterations During Emotion Downregulation in Bipolar I Disorder. Biological Psychiatry, 73(2): 127-135.
- N. Vizueta, JD. Rudie, JD. Townsend, **S. Torrisi**, TD. Moody, SY. Bookheimer, LL. Altshuler. (2012) Regional fMRI Hypoactivation and Altered Functional Connectivity During Emotion Processing in Nonmedicated Depressed Patients with Bipolar II Disorder. Am J Psychiatry. 2012; 169(8):831-40.
- LC Foland-Ross, S. Bookheimer, MD Lieberman, J. Townsend, J. Fischer, **S. Torrisi**, C. Penfold, SK Madsen, PM Thompson, L. Altshuler. (2011) *Normal amygdala activation but deficient ventrolateral prefrontal activation in adults with bipolar disorder during euthymia*. NeuroImage. 2012; 59(1):738-44. Epub 2011 Aug 10.
- I. Teramitsu, A. Poopatanapong, S. Torrisi, SA White. Striatal FoxP2 Is Actively Regulated during

#### PUBLISHED CHAPTERS

Ernst, M., Hale, L, Balderston, N., **Torrisi, S** (2015) Introduction to functional brain connectivity: potential contributions to understanding adolescent vulnerability to substance abuse. In S.F. Ewing, K Witkiewitz, F. Filbey (Eds.) *Neuroimaging and Psychosocial Addiction Treatment*. Palgrave Macmillan.

**Torrisi, S.** (2010). Social Regulation in Frontotemporal Dementia: A Case Study. In A. Mates, L. Mikesell, & M. Smith (Eds.) *Language, Interaction and Frontotemporal Dementia: Reverse Engineering the Social Mind.* London: Equinox Publishing

#### **CONFERENCE PRESENTATIONS**

- **S. Torrisi**, K O'Connell, A Gorka, A Davis, N Balderston, M Ernst, C Grillon. *Voxel-wise Functional Connectivity of BNST and Central Amygdala Under Induced Anxiety*. Presented at Anxiety and Depression Association of America. April 1-2, 2016, Philadelphia, PA.
- **S. Torrisi**, O. Robinson, K O'Connell, A Davis, N Balderston, M Ernst, C Grillon. *Neural Correlates of Response Inhibition Improved by Threat of Shock*. Presented at the 21st annual meeting of the Organization of Human Brain Mapping. June 16, 2015, Honolulu, HI.
- **S. Torrisi**, R. Reynolds, K O'Connell, A Davis, N Balderston, C Grillon, M Ernst. *Resting connectivity of the Bed Nucleus of the Stria Terminalis*. Presented at the 4th biennial Resting State Brain Connectivity Conference. Sept 13, 2014, Cambridge, MA.
- **S. Torrisi**, K. McRae, N. Vizueta, S. Bookheimer, L.L. Altshuler. *Hypoactivity in left vlPFC during reappraisal in bipolar disorder euthymia*. Presented at the 19th annual meeting of the Organization of Human Brain Mapping. June 16-20, 2013, Seattle, WA.
- **S. Torrisi**, N. Vizueta, J. Townsend, E. Lau, S. Bookheimer, L.L. Altshuler. *Effective Connectivity Network Differences During Incidental Emotion Regulation in Euthymic Bipolar Disorder*. Presented at the 67th Society of Biological Psychiatry annual meeting. May 3-5, 2012, Philadelphia, PA.
- **S. Torrisi**, N. Vizueta, E. Berkman, L. Foland-Ross, J.D. Townsend, T.D. Moody, J. Fischer, S.Y. Bookheimer, L.L. Altshuler. *Differences in Amygdala to VLPFC Resting State Functional Connectivity in Bipolar I Euthymia*. Presented at the 17th Annual Organization for Human Brain Mapping meeting. June 26-30, 2011, Québec City, Canada.
- **S. Torrisi,** J.D. Townsend, N. Vizueta, A. Aquino, J. Fischer, S.Y. Bookheimer, L.L. Altshuler *Dysfunction of Frontal and Subcortical Connectivity During a Task of Emotion Regulation in Bipolar II Disorder Depression* presented at New Horizons in Human Brain Imaging: A Focus on Brain Networks and Connectivity, December 1, 2010. Oahu, HI.
- **S. Torrisi**, N. Vizueta, E. Berkman, L. Foland-Ross, J.D. Townsend, T.D. Moody, J. Fischer, S.Y. Bookheimer, L.L. Altshuler. *Fronto-limbic Functional Connectivity in Bipolar II Depression during Emotion Labeling*. Presented at the 4th Annual Meeting of the Social & Affective Neuroscience Society. September 18, 2010. Chicago, IL.

#### MUSIC PUBLICATIONS

**Torrisi, S.**  $F_0 r$  *Woody*, 2013 solo for clarinet and recording Frog Peak Experimental Music Collective, Lebanon, NH

**Torrisi, S.** *acute trio*, 2004 computer-aided clarinet duet Frog Peak Experimental Music Collective, Lebanon, NH

#### ACADEMIC PRESENTATIONS

"Alterations In BNST Functional Connectivity During Induced Anxiety" given in the symposium *How the Human BNST and Amygdala Orchestrate Threat Processing* at SOBP, May 14, 2016, Atlanta, GA. "fMRI-based connectivity methods" Aug 21, 2015, at CSL, Georgetown University Medical Center.

"Resting connectivity of the BNST at ultra-high field" at fMRI/MRI seminar series, May 28, 2015, NIH.

Chair, mini-symposium "Human Subcortical Connectivity at High Field MRI" at SfN, Nov 19, 2014, DC.

Dissertation defense, July 9, 2013, UCLA.

Neuroscience Afterlab Research Forum, February 28, 2013, UCLA.

Presentation on FTD project to "Mind, Medicine and Culture" group, Dec 3rd 2007, UCLA.

#### TEACHING EXPERIENCE

Workshop on Dynamic Causal Modeling, UCLA, NITP Summer School • July 15, 2013

Teachers Assistant, UCLA, Dept. of Neuroscience; NS102 (Neuroanatomy) • Fall, 2012

Private instructor and counselor:

Williams Syndrome Music Camp, Grand Rapids, MI • summers, 2005 - 2009

Private clarinet instruction • 1996 – 2005

General substitute teacher (grades 1-12) & music instructor (grade 4):

Vacaville Unified School District, Vacaville, CA • Sept 2004–June 2005

Lecturer, activities director and counselor:

Donner Mine Music Camp, Truckee, CA • summers 2000-2002

#### PROFESSIONAL DEVELOPMENT

BNST masks made publically available (09.04.15):

http://afni.nimh.nih.gov/afni/community/board/read.php?1,149436,149436#msg-149436

Co-Coordinator of UCLA Neuroimaging + Journal Club • Winter, 2013

Principal clarinetist, Los Angeles Doctors Symphony Orchestra • 2011 – 2012 season

Admissions committee, UCLA Neuroscience Interdepartmental Program • January – March. 2011

Admissions committee, CEAIT computer music festival • CalArts, Valencia, CA • Sept. 2002 – Jan. 2003

#### **AWARDS**

NIH Loan Repayment Program award 2016-2019

Fellowship to Summer Institute in Cognitive Neuroscience June 20-July 1, 2016, UCSB, CA

NIH Fellows Award for Research Excellence (FARE) 2016, travel award.

UCLA Neuroimaging Training Program Fellowship (NIH T90) Sept. 2011-Aug. 2012

New Horizons in Human Brain Imaging: Brain Networks and Connectivity Dec. 1-3, 2010 (Oahu, Hawaii)

Acceptance to NITP Advanced Neuroimaging Summer School, July 12-23, 2010. UCLA

UCLA QGE special course funding, spring & winter, 2010 (for two SPM courses in Boston)

UCLA QGE special course funding, spring, 2009 (for FSL/FreeSurfer course in San Francisco)

CalArts Scholarship, fall, 2003 (matched to L. May & R.V. Hagen)

Lulu May & Richard Von Hagen Scholarship, 2001 - 2002 (to top 5% incoming students)

## **PRESS**

http://content.govdelivery.com/accounts/USNIMH/bulletins/122c889

http://dana.org/BrainWork/2013/When Labeling an Emotion Quiets It/

http://blogs.plos.org/neuroanthropology/2010/10/14/frontotemporal-dementia-neuroanthropology-and-reverse-engineering-the-mind/

## WORKSHOP PARTICIPATION

AFNI Bootcamp. December 2-6, 2013. National Institutes of Health, Bethesda.

SPM Course. February 15-17, 2012. University of Zurich, Switzerland.

Brain Connectivity Workshop. June 21-23, 2011. Université de Montréal. Montréal, Canada.

SPM8 for Basic and Clinical Investigators. Oct 11-15, 2010. A. A. Martinos Center, Charlestown, MA.

NITP Advanced Neuroimaging Summer School, July 12-23, 2010, UCLA.

SPM Network Analysis. March 15-17, 2010. Athinoula A. Martinos Center, Charlestown, MA.

FSL / FreeSurfer course. June 12-16, 2009. FMRIB Centre, MGH. Marriott Hotel, San Francisco, CA.